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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,468

09/19/2006

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Q97089

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23373 7590 04/24/2012
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EXAMINER

DUCHENEAUX, FRANK D

ART UNIT

PAPER NUMBER

1788

NOTIFICATION DATE

DELIVERY MODE

04/24/2012

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/593,468	Applicant(s) IKEDA ET AL.	
	Examiner FRANK D. DUCHENEAUX	Art Unit 1788	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2012.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1 and 5-8 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1 and 5-8 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Rejections

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

2. **Claims 1 and 5-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugino et al. (JP 2003-313330) in view of Kotani et al. (US 5380572) and in further view of Watanabe et al. (US 5795650).

Regarding claims 1 and 5-8, Sugino teaches a polyolefin-based resin laminated film (title) comprising a coating film layer and a polyolefin-based resin substrate film (surface substrate film) (para 0012) suitable for industrial adhesive films and having excellent properties such as durability curve following properties, weatherability, etc. (para 0001), which said substrate film is formed via inflation forming method (para 0028, lines 1-4), has a thickness of 40 to 200 μ m (para 0029), and has a tensile modulus of 300 to 900 MPa (para 0019, lines 1-4).

The Applicants' attention is respectively directed to MPEP 2111.03, wherein it is noted that the transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See, e.g., *Mars Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1376, 71 USPQ2d 1837, 1843 (Fed. Cir. 2004); *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501, 42

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USPQ2d 1608, 1613 (Fed. Cir. 1997) (“Comprising” is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim.); *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); *Ex parte Davis*, 80 USPQ 448, 450 (Bd. App. 1948) (“comprising” leaves “the claim open for the inclusion of unspecified ingredients even in major amounts”). *In Gillette Co. v. Energizer Holdings Inc.*, 405 F.3d 1367, 1371-73, 74 USPQ2d 1586, 1589-91 (Fed. Cir. 2005), the court held that a claim to “a safety razor blade unit comprising a guard, a cap, and a group of first, second, and third blades” encompasses razors with more than three blades because the transitional phrase “comprising” in the preamble and the phrase “group of” are presumptively open-ended. “The word comprising’ transitioning from the preamble to the body signals that the entire claim is presumptively open-ended.”

The recitation in the present claims that the surface substrate film is a single film does not preclude additional elements from the claimed invention such as the coating film layer disclosed in the Sugino reference.

Sugino also teaches that the substrate film is made of polyethylene resins (para 0013) such as low-density polyethylene (LDPE), linear low-density polyethylene (LLDPE) and high density polyethylene (HDPE) and mixtures thereof (para 0014), and contains a UV absorber (para 0020) such as 2,2'-dihydroxy-4-methoxybenzophenone (para 0021), which is identical to the ultraviolet absorbers presently disclosed, in an amount of 0.05 to 5 parts by weight per 100 parts by weight of the polyolefin resin (para 0023).

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Sugino is silent to an HDPE having a density of 0.950 to 0.959 g/cm³ and an LLDPE having a density of 0.923 to 0.933 g/cm³, which is present in an amount of 50 to 90 parts by mass relative to 100 parts by mass of the HDPE/LDPE mixture, a PSA layer having a thickness of 1 to 300 μm and formed from an acrylic resin-based PSA obtained by crosslinking an acrylic polymer having an Mw of 500,000 to 1,100,000 with a polyisocyanate compound, and to the presently claimed spectral transmittance.

However, Kotani teaches pressure sensitive adhesive label sheet (title) comprising a label film comprising a polyethylene resin of a density of 0.940 to 0.948 g/cm³ towards desired stiffness and surface gloss (column 2, lines 63-66 to column 3, lines 1-2) and a secant modulus of 2500 to 5000 kg/m² (245 to 490 MPa) (column 4, lines 1-8), and a PSA laminated thereon (column 2, lines 10-25), wherein the label film is formed of a blend of LDPE and/or LLDPE with HDPE (column 3, lines 20-24).

Given that Sugino and Kotani teach a polyethylene resin substrate film identical to that presently claimed, to include HDPE and LLDPE resin mixture a UV absorber in identical amounts, it is reasonable that substrate film disclosed by the combined references would provide the presently claimed spectral transmittance.

Note that the present claims recite a PE mixture having a density (D) = (weight parts of HDPE) (density of HDPE) + (weight parts of LLDPE) (density of LLDPE), which provides, for example, $D = 0.50(0.928 \text{ g/cm}^3) + 0.50 (0.954 \text{ g/cm}^3) = 0.464 \text{ g/cm}^3 + 0.477 \text{ g/cm}^3 = 0.941 \text{ g/cm}^3$, which is identical to that taught by the Kotani reference noted above.

Therefore, one of ordinary skill would have been well apprised and motivated to select and HDPE/LLDPE blend having the presently claimed densities in the presently claimed proportions to provide a polyolefin-based resin laminated film, which is suitable for industrial adhesive films, having a polyethylene density of the weight average of the constituent ethylene polymer resins as in the present invention.

Sugino and Kotani are silent to a PSA layer having a thickness of 1 to 300 μm and formed from an acrylic resin-based PSA obtained by crosslinking an acrylic polymer having an Mw of 500,000 to 1,100,000 with a polyisocyanate compound.

However, Sugino does teach adhesive tapes formed from the polyolefin-based resin laminates and an adhesive agent layer (para 0061), made of acryl-type adhesive agents, which can be of any form such as solvent, emulsion, hot-melt, etc., and tackifiers, softeners, etc. (para 0062), and it is noted that the PSAs of Kotani are contemplated to be acrylic PSAs (column 5, lines 46-50).

In addition, Watanabe teaches a teaches a pressure sensitive adhesive sheet comprising a PSA layer having a thickness of 5 to 150 μm (column 6, lines 15-23) and PSA having a polymer with a weight-average molecular weight of from 800,000 to 1,800,000, which significantly overlaps that presently claimed, to maintain a firm bonding between the PSA and a base layer (column 4, lines 28-37).

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As set forth in MPEP 2144.05, in the case where the claimed range “overlap or lie inside ranges disclosed by the prior art”, a *prima facie* case of obviousness exists, *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

Watanabe also teaches that said polymer is an acrylic (column 3, lines 42-44) containing carboxylic acid group-containing monomers (column 3, lines 60-62), and said PSA further comprising isocyanate crosslinking agents (column 4, lines 19-22) such as diisocyanate (polyfunctional) (column 8, lines 13-14).

The recitation in the claims that the claimed invention is “for a motor vehicle brake disc antirust film for adhering onto a motor vehicle wheel” is merely an intended use. Applicants attention is drawn to MPEP 2111.02 which states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner’s position that the intended use recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use.

Given that the prior art discloses a PSA layer formed on a substrate as presently claimed, it is clear that the disclosed invention of prior art combination would be capable of performing

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the intended use, i.e. for adhering onto a motor vehicle wheel, presently claimed as required in the above cited portion of the MPEP.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Sugino, Kotani and Watanabe references to provide a polyolefin-based resin laminated film having a PSA layer formed thereon, said PSA composed of polyisocyanate-crosslinked acrylic polymers and having a weight average molecular weight identical to that presently claimed, towards PSA tape formed of an adhesive layer having a required viscosity and thickness and a backing having a required stiffness and surface gloss based on the intended application as in the present invention.

Response to Arguments

3. Applicant's arguments, see the claim amendments and pages 4-8 of the remarks filed 1/27/2012, with respect to the rejection of claims 1 and 5-8 over Sugino et al. in view of Kotani et al. and in further view of Watanabe et al. under 35 U.S.C. 103(a) as set forth in paragraph 4 of the action mailed 10/27/2011, have been fully considered but they are not persuasive.

(II) The Applicants traverse the rejection for the following reasons:

(1) Sugino does not teach or suggest the features of current claim 1 as Sugino does not teach a surface substrate film that is a single film since Sugino discloses a polyolefin-based resin laminated film that is laminated with an acrylic modified urethane resin on at least one surface of said film.

The Examiner respectfully disagrees with the Applicants arguments for the reasons noted above in reference to MPEP 2111.03. Indeed, there is nothing within the language of the present claims that explicitly precludes the inclusion of the coating film layer formed of an acrylic modified urethane resin as disclosed by Sugino.

(2) The Applicants also argue against the Watanabe reference for not teaching or suggesting a polyethylene resin film as presently recited as Watanabe teaches a pressure-sensitive adhesive (PSA) layer including an acrylic based PSA composition and a plasticizer, said plasticizer is an essential component which would have been difficult for the skilled artisan to remove from the PSA composition.

The Applicants also assert that the skilled artisan would not have combined Sugino with Watanabe as they each have different objects.

The Examiner respectfully disagrees with the Applicants arguments for the reason(s) set forth in section (1) above in regards to the cited portions of the MPEP; indeed, there is nothing within the language of the present claims that explicitly precludes the inclusion of a plasticizer in the presently claimed PSA layer.

Also, the Examiner notes that, according to MPEP 2141.01 (a), a reference may be relied on as a basis for rejection of an Applicants' invention if it is "reasonably pertinent to the particular problem with which the inventor is concerned." A reasonably pertinent reference is further described as one which "even though it maybe in a different field of endeavor, it is one

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which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." Watanabe is, therefore, a reasonably pertinent reference in regards to the present invention and that of Sugino/Kotani, because it teaches pressure-sensitive adhesives, which is a function especially pertinent to the invention at hand.

(3) The Applicants continue to assert that one of ordinary skill would not have modified Sugino with Kotani as Kotani discloses a PSA label sheet that is directed for application on a substrate having an elongation property, while the present invention is employed for use on the wheel of a motor vehicle which does not have an elongation property.

In addition, the Applicants' note, Sugino and Watanabe do not disclose PSA sheets for use on an article having an elongation property.

The Applicants further assert that the PSA sheet of Kotani is handled smoothly in an automatic labeling machine process, while the present invention and those disclosed in Sugino and Watanabe do not disclose PSA sheets handled similarly.

Therefore, the Applicants summarize, one of ordinary skill in the art would not have combined Sugino, Kotani and Watanabe in the manner suggested by the previous Action.

The Examiner respectfully disagrees and directs the Applicants' attention to MPEP 2141.01 (a) cited above in section (2), which is pertinent to the present arguments. It is noted that Sugino teaches a polyolefin-based resin laminated film comprising a polyolefin-based resin substrate film, which is suitable for industrial adhesive films and having excellent properties

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such as durability, curve following properties, weatherability, etc, and which is formed of polyethylenes.

To remedy the deficiencies of Sugino, with respect to the presently claimed surface substrate film, Kotani was employed to teach the presently claimed proportions of the polyethylenes and their respective densities towards desired stiffness and surface gloss, which said stiffness is a property of a PSA substrate that is reasonably pertinent to the present invention and to that of Sugino's concerns for the disclosed polyolefin-based resin substrate film.

Further, it is noted that the "test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference... Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art", *In re Keller*, 642 F.2d 413,208 USPQ 871,881 (CCPA 1981) and that "combining the teachings of references does not involve an ability to combine their specific structures", *In re Nievelt*, 482 F.2d 965, 179 USP 224, 226 (CCPA).

Indeed, it would not have been unreasonable for a skilled artisan, having contemplated the polyethylene substrates of Sugino, to also consult the disclosed invention of Kotani in regards to property(ies) imparted to polyethylene-based substrates formed of specific proportions of specific-density polyethylenes such as stiffness concerns as disclosed by Kotani.

(4) The Applicants argue against the Examiner's characterization of the density of the label film comprising a polyethylene resin of a density of 0.940 to 0.948 g/cm³ as teaching or suggesting the presently claimed polyethylene resins of current claim 1 as the Examiner's rationale employed in the calculations could have possibly yielded an identical calculated

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average density with HDPEs having a density higher than that presently claimed and LDPEs having a density lower than that presently claimed.

The Examiner respectfully notes that the calculation included in the prior art rejection was provided to demonstrate that a combination of the polyethylene resins (i.e. HDPE and LLDPE) as disclosed by Kotani would provide the overall density as required by the Kotani invention.

It is also noted that MPEP 2144(I) instructs (emphasis by Examiner) that the rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). See also *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (setting forth test for implicit teachings); *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988) (references do not have to explicitly suggest combining teachings); *Ex parte Clapp*, 227 USPQ 972 (Bd. Pat. App. & Inter. 1985) (examiner must present convincing line of reasoning supporting rejection); and *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993) (reliance on logic and sound scientific reasoning).

As set forth above in the prior art rejection, Kotani clearly teaches that the polyethylene resin have a density of 0.940 to 0.948 g/cm³ towards desired stiffness, and is formed of a blend

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of LDPE and/or LLDPE with HDPE, which are identical to those compounds blended to construct the present invention.

See also, for example, Example 2 of Kotani at column 6, wherein it is disclosed how a polyethylene resin composition is obtained, and that the resulting density of said composition is calculated by consideration of the densities of the low and high density resins employed to form said composition.

Thus, it would have been, at the very least, impliedly suggested to one of ordinary skill in the art, in combination with reasoned knowledge generally available to one of ordinary skill in the art and established scientific principles, to provide a label film having the range of densities required by Kotani via the selection of the polyethylenes presently claimed and in proportions presently claimed, and in combination with the pertinent Sugino and Watanabe references, arrive at the presently claimed invention.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK D. DUCHENEAUX whose telephone number is (571)270-7053. The examiner can normally be reached on M-F, 10:30 A.M. - 7:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alicia A. Chevalier can be reached on (571)272-1490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. D. D./
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4/16/2012

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